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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,812	07/26/2000	Timothy J. Van Hook	00100.00.0105	8263
29153 7590 06/04/2010 ADVANCED MICRO DEVICES, INC. C/O VEDDER PRICE P.C. 222 N.LASALLE STREET CHICAGO, IL 60601				
EXAMINER				
HSU, JONI				
ART UNIT		PAPER NUMBER		
2628				
MAIL DATE		DELIVERY MODE		
06/04/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/625,812

**Applicant(s)**

VAN HOOK, TIMOTHY J.

**Examiner**

JONI HSU

**Art Unit**

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-31 is/are allowed.
- 6) ☒ Claim(s) 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Statement(s) (PTO/SF/42)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed March 3, 2010 have been fully considered but they are not persuasive. As per Claim 33, Applicant argues that assuming that the Examiner considers the "attempting task" of Joffe (US006330584B1) to correspond to the presently recited "first program", such task has not been completed, but merely suspended (p. 5).

In reply, the Examiner points out that the "attempting task" of Joffe is considered to correspond to the presently recited "second program", not the "first program". The other task sharing the resource that has finished accessing the resource as taught by Joffe (col. 2, lines 29-39) is considered to correspond to the presently recited "first program". Thus, the "first program" has been completed.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe (US006330584B1) in view of Krishna (US006161173A).

Joffe teaches a method, by a programmable processor, of executing instructions from plurality of programs (col. 2, lines 66-67), assigning 1st output register slot to first of plurality of programs wherein each of the plurality of programs has plurality of instructions (col. 1, line 62-col. 2, line 11). If wait signal is asserted, instruction execution is not completed, so instruction will be executed again until wait signals are deasserted, then next instruction can be executed (col. 10, lines 20-24, 31-32), and process repeats until all instructions have been executed. Joffe teaches if task attempts to access unavailable resource, task is suspended. When resource becomes available, suspended task is resumed, and instruction accessing resource is re-executed. Task does not get access to same resource until after every other task sharing resource has finished accessing resource (col. 2, lines 29-39). If Wait signal is asserted, instruction execution is not completed and PC register is frozen, but task remains active, and instruction will be executed again starting next clock cycle. If Suspend/Wait signals are deasserted, the PC register is changed to point to next instruction (col. 10, lines 19-32). So, Joffe teaches checking to see if Suspend/Wait signals are desasserted, which indicates instruction execution is completed (col. 10, lines 19-32) and resource has become available (col. 2, lines 32-34), and resource becomes available after every other task sharing resource has finished accessing resource (col. 2, lines 29-39). So, Joffe teaches checking to see if all of the programs, including said first program, are completed. So, Joffe teaches executing instructions of first program until program is completed; loading output of first program into its reserved space when first program is completed (col. 9, lines 26-41); checking to see if all of plurality of programs are completed (col. 2, lines 35-39).

Wait signal is asserted if register is not available, and wait signal is deasserted if register is available for new instruction (col. 10, lines 20-24, 31-32). Each task (program) has separate register and separate flags (col. 2, lines 11-13). So, second output register slot is assigned to second program. If task attempts to access unavailable resource, task is suspended. When resource becomes available, suspended task is resumed, and instruction accessing resource is executed (col. 2, lines 29-34). So, Joffe teaches checking to see if second register slot is available to assign to second program from plurality of programs when first program is completed; checking to see if one or more instructions are available when at least one of the programs is not completed (col. 2, lines 35-39).

However, Joffe does not teach placing no-op when no more instructions are available. However, Krishna teaches information in each entry describes either no-op or associated operation which is to be executed (col. 5, lines 36-38). So, when there is no-op, that means that no more instructions are available.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Joffe to include placing no-op when no more instructions are available because Krishna suggests that a no-op is needed to inform the processor that there are no operations to be executed, as opposed to there being operations to be executed or are being executed (col. 5, lines 36-38).

***Allowable Subject Matter***

5. Claims 25-31 are allowed.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONI HSU whose telephone number is (571)272-7785. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH

/Joni Hsu/  
Primary Examiner, Art Unit 2628